4-173-749-**11** (1)

SONY

Solid-State Memory Camcorder

Supplement

PMW-350K
PMW-350L

XDCAM EX SxS i. CINEALTA Exmor FULL HD 3CMOS HDMI

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Foreword

This supplement contains the following supplementary information about the PMW-350K/350L (called “the camcorder” below).

- Using a PHU-60K/120K/120R
- Using a “Memory Stick” with the Media Adaptor
- Operating from the RM-B150/B750
- Functions That Can Be Controlled from the RM-B150/B750
- Output Formats and Limitations

Using a PHU-60K/120K/120R

You can use an optional PHU-60K, PHU-120K, or PHU-120R Professional Hard Disk Unit with this camcorder.

Notes

- High-speed playback may not be possible with the PHU-60K/120K/120R.
- When using the Slow & Quick Motion function with the PHU-60K/120K/120R, you cannot perform slow motion shooting.

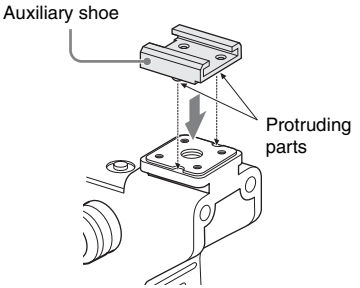
Attaching/Removing the PHU-60K/120K/120R

Recording/playback can be made using the PHU-60K/120K/120R in the same manner as with SxS memory cards if you connect the PHU connection cable of the PHU-60K/120K/120R to an SxS memory card slot of the camcorder.

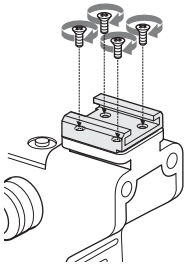
To mount the hard disk unit on the camcorder

By using the cold shoe kit (an auxiliary shoe, four screws, and a bottom plate) supplied with the camcorder, you can mount the hard disk unit on the accessory shoe of the camcorder.

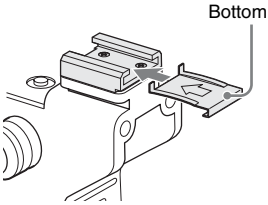
1 Fit the protruding parts on the bottom side of the auxiliary shoe into the indents on the accessory shoe.



2 Secure the auxiliary shoe with the four screws.



3 Fit the bottom plate (spring type) into the auxiliary shoe.



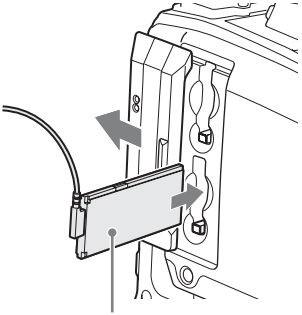
Insert the bottom plate from the end where the slits for the screw holes of the auxiliary shoe are not open.
If you secure the auxiliary shoe in the direction opposite that shown in the above figure with the slit open end forward, insert the bottom plate from the direction opposite to that shown in the figure.

4 Attach the shoe adapter (supplied with the PHU-60K/120K/120R) to the hard disk unit, mount the unit to the auxiliary shoe on the camcorder, and secure it with the lock lever of the shoe adapter.

For details, refer to the Operating Instructions of the PHU-60K/120K/120R.

To connect the PHU connection cable

1 Open the cover of the card slot block and insert the PHU connection cable into a slot.



2 Turn on the PHU-60K/120K/120R.

The POWER indicator of the PHU-60K/120K/120R lights in green.
Subsequently, the ACCESS lamp of the camcorder lights in orange then changes to green once the unit is ready for use.

Note

Bundle the cable so that it will not accidentally become entangled with nearby objects.

To disconnect the PHU connection cable

Operate in the same manner as when you remove an SxS memory card from the slot.

Formatting the PHU-60K/120K/120R

To format a PHU-60K/120K/120R when you connect it

When you connect an unformatted PHU-60K/120K/120R, or connect a PHU-60K/120K/120R that is formatted to different specifications, or power the camcorder on with an unformatted PHU-60K/120K/120R connected, or exit mass storage mode with an unformatted PHU-60K/120K/120R connected, a message appears on the viewfinder screen asking if you want to format the device.
If the message appears, turn the MENU knob to select [Execute], and then press the knob.

Notes

- The format confirmation message does not appear if you are currently setting other information.
- The format confirmation message may disappear if the camcorder needs to display other information. It reappears after the other information has been set.

To format a PHU-60K/120K/120R from a menu

You can format a PHU-60K/120K/120R by using OPERATION >Format Media in the setup menu. This command is available when the PHU-60K/120K/120R is already formatted, unformatted, and formatted in an unsupported format.

1 **Select OPERATION >Format Media in the setup menu.**

2 **Select [Media(A)] (slot A) or [Media(B)] (slot B).**

3 **Turn the MENU knob to select "Execute", and press the knob.**
The format confirmation message appears on the viewfinder screen.

4 **Turn the MENU knob to select [Execute], and then press the knob.**

For information about menu operations, refer to the Operating Instructions of the camcorder.

Formatting begins.
During restoration, an in-progress message and status bar (%) are displayed, and the ACCESS lamp lights in orange.
When formatting is completed, a completion message is displayed for three seconds.

Restoring the PHU-60K/120K/120R

If an error occurs with data on the PHU-60K/120K/120R for some reason, the hard disk must be restored.
If a PHU-60K/120K/120R that needs to be restored is connected, a message that prompts you to execute restoration is displayed on the viewfinder screen.

To restore the hard disk

Turn the MENU knob to select [Execute], and then press the knob.
The restoration begins automatically.
During restoration, an in-progress message and status bar (%) are displayed, and the ACCESS lamp lights in orange.
When restoration is completed, a completion message is displayed for three seconds.

If restoration fails

- A PHU-60K/120K/120R on which an error occurred may become usable again through repeated formatting.
- In some cases, some clips cannot be restored. Playback of clips that can be restored becomes possible again.

Using a “Memory Stick” with the Media Adaptor

Use of the optional MEAD-MS01 Media Adaptor permits you to insert a “Memory Stick” to the SxS memory card slot of the camcorder and use it for recording and playback in the same way as with an SxS memory card.

Usable “Memory Stick”

“Memory Stick PRO-HG Duo HX” series

For details on use of the MEAD-MS01 Media Adaptor, refer to the operating instructions of the adaptor.

Notes

- High-speed playback may not be properly achieved with a “Memory Stick.”
- When using the Slow & Quick Motion function with the “Memory Stick”, you cannot perform slow motion shooting.

Formatting a “Memory Stick”

A “Memory Stick PRO-HG Duo HX” to be used with this camcorder must be formatted using the format function of this camcorder.
For a “Memory Stick PRO-HG Duo HX” that is not formatted or that was formatted with another system, the message “Cannot Use Media(A)/ Unsupported File System” is displayed.
Format the “Memory Stick PRO-HG Duo HX” as instructed below.

To execute formatting

1. **Select OPERATION >Format Media in the setup menu.**
2. **Select [Media(A)] (slot A) or [Media(B)] (slot B).**
3. **Turn the MENU knob to select “Execute”, and press the knob.**
   The format confirmation message appears on the viewfinder screen.
4. **Turn the MENU knob to select [Execute], and then press the knob.**

   For information about menu operations, refer to the Operating Instructions of the camcorder.

   Formatting begins.
   An in-progress message and status bar (%) are displayed, and the ACCESS lamp lights in orange. When formatting is completed, a completion message is displayed for three seconds.

Notes

- In formatting, all data in a “Memory Stick,” including protected images, are erased and cannot be restored.
- This camcorder uses a unique format, which differs from the standard “Memory Stick” format, for recording. For this reason, inserting a “Memory Stick” formatted with this camcorder and in which data have been recorded into a “Memory Stick” slot of a computer may cause a malfunction of the computer or may damage the recorded data.

Connection between the camcorder and a computer

To use a “Memory Stick” in which data have been recorded with an XDCAM EX-series product, establish USB connection between the computer and this camcorder and insert it into the slot of the camcorder, or use a specified USB card reader.[1)]

1) *For details on the USB card reader, visit the XDCAM EX web sites cited in Chapter 1 “Overview” of the Operating Instructions for the camcorder.*

To use a “Memory Stick” formatted with this camcorder with other devices

With a computer

- First make a backup copy of the data recorded in the “Memory Stick.”
- When the backup is done, establish USB connection between the computer and this camcorder, insert the “Memory Stick” into the slot of this camcorder, then format it from the menu of the computer.

The formatting method depends on the OS of the computer.

For details, refer to the operating instructions of the computer to be used.

With a non-computer device having a “Memory Stick” slot

- First make a backup copy of the data recorded in the “Memory Stick.”
- When the backup is done, format the “Memory Stick” with the device to be used.

For details on the formatting method, refer to the operating instructions of the device to be used.

- "Memory Stick" and MEMORY STICK ™ are trademarks of Sony Corporation.
- "Memory Stick PRO-HG Duo" and MEMORY STICK PRO-HG DUO are trademarks of Sony Corporation.

Operating from the RM-B150/B750

When the RM-B150 or RM-B750 Remote Control Unit is connected, some camcorder functions can be controlled from the RM-B150/B750.
You can use the RM-B750's display or a video monitor connected to the MONITOR connector of the RM-B150/B750 to control the camcorder by menu operations and monitor the camcorder picture.

To connect

Using the remote cable (10 m (33 ft)) supplied with the RM-B150/B750, connect between the REMOTE connector (8-pin) of the camcorder and the camera connector of the RM-B150/B750. When you turn on the camcorder after the connection, the camcorder enters Remote Control mode.

Adjusting the Camcorder from the RM-B150/B750

You can control menu and recording operations from the RM-B150/B750.

For the functions that can be controlled from the RM-B150/B750, see "Functions That Can Be Controlled from the RM-B150/B750" on page 11.

Notes

- Remote Control operations cannot be made if USB connection to the camcorder is enabled.
- Do not connect or disconnect the RM-B150/B750 when the camcorder is on.

The following controls of the camcorder becomes inoperative when the RM-B150/B750 is connected.
- GAIN selector
- WHITE BAL switch
- AUTO W/B BAL switch
- SHUTTER selector
- OUTPUT/DCC switch
- Buttons and switches to which the Turbo Gain function has been assigned, including the ASSIGN. 1/3 switches, the ASSIGNABLE 4

switch, the COLOR TEMP. button, and the ASSIGNABLE 5 switch.
- REC START button: the VTR button on the lens, and buttons and switches to which the function has been assigned using OPERATION >Assignable SW in the setup menu, including the ASSIGN. 1/3 switches, the ASSIGNABLE 4 switch, the COLOR TEMP. button, and the ASSIGNABLE 5 switch (when MAINTENANCE >Camera Config >RM Rec Start in the setup menu is set to RM).

To connect the monitor to the RM-B150/B750

The MONITOR connector (BNC type) of the RM-B150/B750 outputs a composite signal. To connect a monitor to the MONITOR connector on the RM-B150/B750, use the black cable supplied with the RM-B150/B750.

To release Remote Control mode

Turn off the camcorder and disconnect the RM-B150/B750.
The settings on the controls on the camcorder become valid.

Camera image quality adjustment items when the RM-B150/B750 is connected

When the RM-B150/B750 is connected, the parameters for camera image quality adjustment items (paint data) are reset to the parameters that were specified the last time that RM-B150/B750 was connected.

Function of the recording start/stop buttons when the RM-B150/B750 is connected

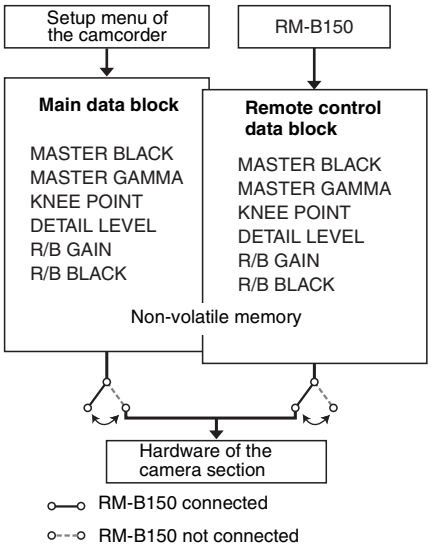
When the RM-B150/B750 is connected, you can make a setting to determine which of the recording start/stop buttons you will use. This setting is made using MAINTENANCE >Camera Config >RM Rec Start in the setup menu.

Relationship between the setting of the RM Rec Start item and the function of recording start/stop buttons

Recording start/stop button	Settings of RM Rec Start		
	RM	CAM	PARA
Camcorder's REC START button	Disabled	Enabled	Enabled
Lens' VTR button	Disabled	Enabled	Enabled
Buttons and switches to which the recording start/stop function has been assigned (ASSIGN. 1/3 switches, ASSIGNABLE 4 switch, COLOR TEMP. button, and ASSIGNABLE 5 switch)	Disabled	Enabled	Enabled
Remote control unit's VTR button	Enabled	Disabled	Enabled

Structure of the paint adjustment data

The non-volatile memory of the camcorder used for storing paint adjustment data consists of two regions as shown below: one is the "main data block" that is used when a remote control unit is not connected, and the other is the "remote control data block" that is used when a remote control unit is connected. Paint adjustment data is automatically selected and output to the camera section depending on whether or not a remote control unit such as the RM-B150 is connected.



When a remote control unit is connected to the camcorder, the "remote control data block" is selected as the current paint data block, and the paint adjustment parameters that were in effect the last time the remote control unit was used are recalled.

The settings of the absolute value rotational controls [1)] and absolute value switches [2)] are overwritten by those on the remote control unit after the remote control unit is connected.

When the remote control unit is disconnected from the camcorder, the "main data block" becomes effective. Thus the camcorder will return to the settings that were in effect before the remote control unit was connected.

1) **Absolute value rotational controls:** The data corresponding to the angular position of controls is output. Rotational controls for which the data corresponding to the amount of their rotation is output are called relative value controls.

2) **Absolute value switches:** Like toggle switches or slide switches (except most momentary switches), the switches (or knobs) whose positions must coincide with their functions are called absolute value switches.

When MAINTENANCE >Camera Config >RM Common Memory is set to [On] in the setup menu, you can use settings of the paint adjustment data stored in the main data block even if you connect the remote control unit. In this case, the settings stored in the main data block will be renewed when you change the settings on the remote control unit. Thus, the settings of the paint data made with the remote control unit can be retained even if the remote control unit is removed. However, if the switch position on the remote control unit differs from the one on the camcorder, the switch position on the camcorder takes precedence over that on the remote control unit.

Also, it is possible to keep the settings that are in effect before you connect the remote control unit. In this case, you should set the control knob to the relative value mode on the remote control unit.

For details, refer to the Operation Manual supplied with the remote control unit.

Operating the Menu from the RM-B150

1 Set the DISPLAY switch to MENU.

The camcorder menus can be displayed on a video monitor connected to the MONITOR connector of the RM-B150.

2 Select and set the menu items, using the MENU SELECT knob and the CANCEL/ENTER switch.

3 When the settings are completed, set the DISPLAY switch to ON or OFF to exit the menu.

For details on operations of the RM-B150, refer to the Operation Manual of the RM-B150.

Operating the Menu from the RM-B750

1 Press and light the MONITOR button then press the VF MENU button.

The camcorder menus can be displayed on the RM-B750's display or a video monitor connected to the MONITOR connector of the RM-B750.

2 Select and set the menu items, using the MENU SELECT knob, ENTER button, and CANCEL button.

3 When the settings are completed, press the VF MENU button to exit the menu.

For details on operations of the RM-B750, refer to the Operation Manual of the RM-B750.

Functions That Can Be Controlled from the RM-B150/B750

You can adjust the functions in the following table by using menu operations, adjustment knobs, switches, and the touch panel (RM-B750 only) on the RM-B150/B750.

For details on operations, refer to the Operation Manual of the RM-B150/B750.

How to Read the Table

The following symbols are used to indicate operations on the RM-B150 and RM-B750.
Switch: A
Touch panel: B
Knob: C
Menu operation: D (Camcorder's menus can be operated from the RM-B150/B750.)

Menu items	Sub-item	Setting	Description	RM-B150	RM-B750
Gain	Step Gain	–	Sets the master gain.	A	–
	L/M/H	Low/Mid/High	Switches between three gain levels, when the master gain has been set from a menu.	A [1)]	–
	Step	–3/0/3/6/9/12/18/24/30/36/42dB	Sets the master gain.	C+A [1)]	B
Bars	Bars	On/Off	Turns color bar output on or off.	A	A
Shutter	Step Shutter Setting	On/Off	Turns the step shutter function on or off.	A	B
	Step Shutter Speed	–	Sets the step shutter speed.	C	C
	ECS Setting	On/Off	Turns ECS on or off.	A	B
	ECS Frequency	–	Selects the ECS frequency.	C	C
	SLS Setting	On/Off	Turns SLS on or off.	–	B/– [2)]
	SLS Speed	–	Sets the SLS speed (number of frames).	–	C [2)]
DCC	DCC	On/Off	Turns DCC on or off.	A	B
	DCC Point	–99 to **±0** to +99	Adjusts the DCC minimum knee point.	D	C+D [2)]
White Balance	AWB	Start/Stop	Starts execution of auto white balance adjustment, or stops execution.	A	A+B
	White Memory	A/B/C/Preset	Switches the auto white balance memory.	A	B
	ATW	On/Off	Turns ATW on or off.	A [3)]	B
	5600K	On/Off	Turns color temperature conversion on or off.	–	A+B
Black	ABB	Start/Stop	Starts execution of auto black balance adjustment, or stops execution.	A	A+B

Menu items	Sub-item	Setting	Description	RM-B150	RM-B750
Iris	Iris Mode	Auto/Manual	Selects the iris mode.	A	A
	Iris Speed	–99 to **±0** to +99	Specifies the control speed (speed of reaction to changes in the video). (Larger values specify quicker reaction times.)	D	C+D
	Iris Level	–99 to **±0** to +99	Adjusts the level of the auto iris target value.	D	C+D
	Iris APL Ratio	–99 to **±0** to +99	Adjusts the mix ratio of auto iris detection peak value and average value.	D	C+D
	Iris Window Ind	On/**Off**	Turns on or off the function that displays a frame marker for the auto iris detection window.	D	C+D
	Close	On/Off	Turns forcible iris closing on or off.	–	A
Rec Function	Slow & Quick	On/**Off**	Turns the Slow & Quick Motion function on or off.	D	B+D [2)]
	Frame Rate	The available settings vary depending on the Format >HD System line setting.	When the Slow & Quick setting is On, sets the frame rate for Slow & Quick Motion shooting.	D	C+D [2)]
Camcorder Menu	Menu	On/Off	Operates the camcorder menu.	A	A
	Cancel/Preset	Cancel/Preset		A	A
	Select/Set	Select (Up/ Down)/Set		A	C
Panel Active	Panel Active	On/Off	Enables (On) or disables (Off) panel operations.	A	A
Standard	Standard	On/Off	Selects standard mode.	A	A
ND Filter	ND Filter	Display only	Turns the display of ND filter settings on or off. (The settings cannot be changed, only displayed.)	–	–
CC Filter	CC Filter	A/B/C/D	Selects a CC filter.	A	B
Extender IND	Extender	**On**/Off	Turns the lens extender indication on or off. (The settings cannot be changed, only displayed.)	–	–
Call	Call	On/Off	Enables (On) or disables (Off) calls from externally connected equipment.	–	A
Media	Rec	Start/Stop	Starts or stops recording.	A	A
	Play	Play/Pause	Starts playback.	A	A
	FREV	–	Starts high-speed reverse playback.	A	A
	FFWD	–	Starts high-speed playback	A	A
	Stop	–	Stops playback.	A	A
	Rec Review	–	Starts a recording review.	A	A

Menu items	Sub-item	Setting	Description	RM-B150	RM-B750
Switch Status	Gamma	**On**/Off	Turns gamma correction on or off.	D	B+D
	Black Gamma	On/**Off**	Turns black gamma correction on or off.	A	A+B
	Matrix	**On**/Off	Turns linear matrix correction and user matrix correction on or off.	D	B+D
	Knee	**On**/Off	Turns knee correction on or off.	D	B+D
	White Clip	**On**/Off	Turns white clip correction on or off.	D	B+D
	Detail	**On**/Off	Turns detail correction on or off.	D	B+D
	Flare	**On**/Off	Turns flare correction on or off.	D	B+D
	Test Saw	On/**Off**	Turns the test saw signal on or off.	A	A
White	R Gain<A>	–99 to ±**0** to +99	Specifies the white balance R gain value saved in memory A.	C	C
	B Gain<A>	–99 to ±**0** to +99	Specifies the white balance B gain value saved in memory A.	C	C
	R Gain<B>	–99 to ±**0** to +99	Specifies the white balance R gain value saved in memory B.	C	C
	B Gain<B>	–99 to ±**0** to +99	Specifies the white balance B gain value saved in memory B.	C	C
Black	Master Black	–99 to ±**0** to +99	Specifies the master black level.	C	C
	R Black	–99 to ±**0** to +99	Specifies the R black level.	C	C
	B Black	–99 to ±**0** to +99	Specifies the B black level.	C	C
Flare	Flare	**On**/Off	Turns flare correction on or off.	D	B+D
	R Flare	–99 to ±**0** to +99	Sets the R flare correction level.	C	C
	G Flare	–99 to ±**0** to +99	Sets the G flare correction level.	C	C+D
	B Flare	–99 to ±**0** to +99	Sets the B flare correction level.	C	C
Gamma	Gamma	**On**/Off	Turns gamma correction on or off.	D	B+D
	Step Gamma	0.35 to **0.45** to 0.90 (in steps of 0.05)	Specifies a gamma correction value in steps of 0.05.	D	B+D
	Master Gamma	–99 to ±**0** to +99	Specifies the master gamma level.	C	C
	R Gamma	–99 to ±**0** to +99	Specifies the R gamma level.	D	C
	G Gamma	–99 to ±**0** to +99	Specifies the G gamma level.	D	C+D
	B Gamma	–99 to ±**0** to +99	Specifies the B gamma level.	D	C
	Gamma Select	When Gamma Category is STD: 1 DVW 2 ×4.5 3 ×3.5 4 240M 5 R709 6 ×5.0	Select the gamma table to use in gamma correction.	D	C+D
		When Gamma Category is HG: 1 3250 2 4600 3 3259 4 4609		D	C+D [2]
	Gamma Category	**STD**/HG	Selects use of standard gamma (STD) or HyperGamma (HG).	D	B+D [2]

Menu items	Sub-item	Setting	Description	RM-B150	RM-B750
Black Gamma	Black Gamma	On/**Off**	Turns black gamma correction on or off.	A [1)]	A+B
	Gamma Level	–99 to **±0** to +99	Specifies the master black gamma level.	C [1)]	C
	Range	Low/L.Mid/ H.Mid/**High**	Selects the black gamma correction effective range.	D	B+D
Knee	Knee	**On**/Off	Turns knee correction on or off.	D	B+D
	Knee Point	50% to **95.0%** to 109% (in steps of 1%)	Specifies the knee point.	C	C+D
	Knee Slope	–99 to **±0** to +99	Specifies the knee slope.	C	C+D
	Knee Saturation	**On**/Off	Turns the knee saturation function on or off.	A	A+B+D
	Knee Saturation Level	–99 to **±0** to +99	Specifies the knee saturation level.	C	C+D
White Clip	White Clip	**On**/Off	Turns white clipping adjustment on or off (Off = fixed as 109%).	D	B+D
	White Clip Level	NTSC Area is selected for Country 90.0% to **108.0%** to 109.0%	Specifies the white clip level.	D	C+D
		PAL Area is selected for Country 90.0% to **105.0%** to 109.0%			
Detail(HD mode)/ Detail(SD mode)	Detail	**On**/Off	Turns detail adjustment on or off.	D	B+D
	Level	–99 to **±0** to +99	Specifies the detail level.	C [1)]	C
	H/V Ratio	–99 to **±0** to +99	Specifies the mix ratio between the H detail level and the V detail level.	D	C+D
	Crispening	–99 to **±0** to +99	Specifies the crispening level.	D	C+D
	Level Depend	**On**/Off	Turns the level depend function on or off.	D	B+D
	Level Depend Level	–99 to **±0** to +99	Specifies the level depend level.	D	C+D
	Frequency	–99 to **±0** to +99	Specifies the central frequency for H detail signal. Larger values give finer details.	D	C+D
	Knee Aperture	On/**Off**	Turns the linear knee aperture function on or off.	D	B+D
	Knee Aperture Level	–99 to **±0** to +99	Specifies the knee aperture level.	D	C+D
	Limit	–99 to **±0** to +99	Specifies the detail limiter values for both the white-side and black-side direction.	D	C+D
	White Limit	–99 to **±0** to +99	Specifies the white-side detail limiter value.	D	C+D
	Black Limit	–99 to **±0** to +99	Specifies the black-side detail limiter value.	D	C+D

Menu items	Sub-item	Setting	Description	RM-B150	RM-B750
Skin Detail	Skin Detail	On/**Off**	Turns skin detail correction on or off.	A+C [1)]	A+B
	Area Detection	Color detection screen	Detects the color to be targeted by skin detail correction.	D	B+D
	Area Indication	On/**Off**	Turns on or off the function that displays a zebra pattern in the area targeted by skin detail correction.	D	B+D
	Level	–99 to ±**0** to +99	Specifies the skin detail level.	C [1)]	C
	Saturation	–99 to ±**0** to +99	Specifies the saturation of the color targeted by skin detail correction.	D	C+D
	Hue	**0** to 359	Specifies the hue of the color targeted by skin detail correction.	D	C+D
	Width	0 to **40** to 90	Specifies a range for the hue of the color targeted by skin detail correction.	D	C+D
Matrix	Matrix	**On**/Off	Turns the matrix correction function on or off.	D	B+D
	Preset Matrix	**On**/Off	Turns the preset matrix function on or off.	D	B+D
	Preset Select	1/**2**/3/4/5/6	Selects a preset matrix. 1: SMPTE-240M equivalent 2: ITU-709 equivalent 3: SMPTE WIDE equivalent 4: NTSC equivalent 5: EBU equivalent 6: ITU-601 equivalent	D	B+D
	User Matrix	On/**Off**	Turns the user matrix function on or off.	D	B+D
	User Matrix R-G	–99 to ±**0** to +99	Specifies a freely defined R-G user matrix.	D	C+D
	User Matrix R-B	–99 to ±**0** to +99	Specifies a freely defined R-B user matrix.	D	C+D
	User Matrix G-R	–99 to ±**0** to +99	Specifies a freely defined G-R user matrix.	D	C+D
	User Matrix G-B	–99 to ±**0** to +99	Specifies a freely defined G-B user matrix.	D	C+D
	User Matrix B-R	–99 to ±**0** to +99	Specifies a freely defined B-R user matrix.	D	C+D
	User Matrix B-G	–99 to ±**0** to +99	Specifies a freely defined B-G user matrix.	D	C+D

Menu items	Sub-item	Setting	Description	RM-B150	RM-B750
Multi Matrix	Multi Matrix	On/**Off**	Turns the multi matrix correction function on or off.	D	B+D
	Area Indication	On/**Off**	Turns on or off the function that displays a zebra pattern in the color area targeted by multi matrix correction.	D	B+D
	Axis	**B**/B+MG–/MG/MG+/R/R+/YL–/YL/YL+/G–/G/G+/CY/CY+/B–	Specifies a color targeted by multi matrix correction (16-axis mode).	D	C+D
	Hue	–99 to **±0** to +99	Specifies the hue of the color targeted by multi matrix correction for each 16-axis mode.	D	C+D
	Saturation	–99 to **±0** to +99	Specifies the saturation of the color targeted by multi matrix correction for each 16-axis mode.	D	C+D
V Modulation	V Modulation	**On**/Off	Turns V modulation shading on or off.	D	B+D
	Master V Modulation	–99 to **±0** to +99	Specifies the master V modulation.	C [1)]	C
	R V Modulation	–99 to **±0** to +99	Specifies the V modulation level of R signal.	D	C+D
	G V Modulation	–99 to **±0** to +99	Specifies the V modulation level of G signal.	D	C+D
	B V Modulation	–99 to **±0** to +99	Specifies the V modulation level of B signal.	D	C+D
Low Key Saturation	Low Key Saturation	On/**Off**	Turns low key saturation correction on or off.	D	B+D
	Level	–99 to **±0** to +99	Specifies the saturation of colors in low luminance areas.	D	C+D
Noise Suppress	Noise Suppress	**On**/Off	Turns noise suppression on or off.	D	B [2)]+D
White Shading	R/G/B White H Saw	–99 to **±0** to +99	Specifies a SAW white shading correction value for the horizontal direction.	D	C+D
	R/G/B White H Para	–99 to **±0** to +99	Specifies a parabola white shading correction value for the horizontal direction.	D	C+D
	R/G/B White V Saw	–99 to **±0** to +99	Specifies a SAW white shading correction value for the vertical direction.	D	C+D
	R/G/B White V Para	–99 to **±0** to +99	Specifies a parabola white shading correction value for the vertical direction.	D	C+D

Menu items	Sub-item	Setting	Description	RM-B150	RM-B750
Black Shading	R/G/B Black H Saw	–99 to **±0** to +99	Specifies a SAW black shading correction value for the horizontal direction.	D	C+D
	R/G/B Black H Para	–99 to **±0** to +99	Specifies a parabola black shading correction value for the horizontal direction.	D	C+D
	R/G/B Black V Saw	–99 to **±0** to +99	Specifies SAW black shading correction value for the vertical direction.	D	C+D
	R/G/B Black V Para	–99 to **±0** to +99	Specifies a parabola black shading correction value for the vertical direction.	D	C+D
	Auto Black Shading	Start/Cancel	Executes auto black shading compensation.	D	B+D
Scene	☐1	Standard	File number and file ID	D	B+D
	☐2	Standard	File number and file ID	D	B+D
	☐3	Standard	File number and file ID	D	B+D
	☐4	Standard	File number and file ID	D	B+D
	☐5	Standard	File number and file ID	D	B+D
	Scene Recall	Execute/Cancel	Loads a scene file.	D	B+D
	Scene Store	Execute/Cancel	Saves a scene file.	D	B+D
Reference	Reference Store	Execute/Cancel	Stores the current setting of reference file items in the reference file that is maintained in internal memory (execute by selecting Execute).	D	B+D

1) RM Configuration Menu

2) Depending on RM-B750 version

3) When OPERATION >White Setting >White Switch <B> is set to ATW

Ajustments of the lens functions

When the supplied or optional exclusive lens is used, the following functions can also be controlled from the RM-B150/B750.

Function	Operation on the lens	RM-B150	RM-B750
Iris adjustment	Iris ring	A	A
Iris close	–	–	A
Switching between auto iris and manual iris	IRIS switch	A	A

Output Formats and Limitations

Video Formats and Output Signals

The format of signals output from the VIDEO OUT, HD/SD SDI OUT, and HDMI connectors varies according to the HD/SD mode, the current recording and playback video formats, and the output signal specified by OPERATION >Input/Output >Output & i.LINK in the setup menu. (Depending on the above conditions, some limitations may also apply to signal output and input.)

Video formats and output signals, as specified by Input/Output settings (when OPERATION >Format >Country is set to NTSC)

Video format	Input/Output settings				Output signal (i.LINK (HDV/DV) is I/O signal)			
	Output& i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
HQ 1920/ 59.94i& HQ 1440/ 59.94i	HD&HDV	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	1920×1080/ 59.94i	1920×1080/ 59.94i	1920×1080/ 59.94i Y signal	
			Camera/ i.LINK	Disable				
	SD&HDV	–	i.LINK	Enable	Muting			
			Camera	Enable	720×480/ 59.94i	720×480/ 59.94i	Composite 720×480/ 59.94i	
			Camera/ i.LINK	Disable				
	SD&DV	–	i.LINK	Enable	720×480/ 59.94i	720×480/ 59.94i	Composite 720×480/ 59.94i	DV (720×480/ 59.94i)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	480P	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	Muting	720×480/ 59.94P	Output disabled	
			Camera/ i.LINK	Disable				

Video format	Input/Output settings				Output signal (i.LINK (HDV/DV) is I/O signal)			
	Output& i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
SP 1440/ 59.94i	HD&HDV	–	i.LINK	Enable	1920×1080/ 59.94i	1920×1080/ 59.94i	1920×1080/ 59.94i Y signal	HDV (1920×1080/ 59.94i)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	SD&HDV	–	i.LINK	Enable	720×480/ 59.94i	720×480/ 59.94i	Composite 720×480/ 59.94i	HDV (1920×1080/ 59.94i)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	SD&DV	–	i.LINK	Enable	720×480/ 59.94i	720×480/ 59.94i	Composite 720×480/ 59.94i	DV (720×480/ 59.94i)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	480P	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	Muting	720×480/ 59.94P	Output disabled	
			Camera/ i.LINK	Disable				
HQ 1920/ 29.97P& HQ 1440/ 29.97P	HD&HDV	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	1920×1080/ 29.97PsF	1920×1080/ 29.97PsF	1920×1080/ 29.97PsF Y signal	
			Camera/ i.LINK	Disable				
	SD&HDV	–	i.LINK	Enable	Muting			
			Camera	Enable	720×480/ 29.97PsF	720×480/ 29.97PsF	Composite 720×480/ 29.97PsF	
			Camera/ i.LINK	Disable				
	SD&DV	–	i.LINK	Enable	720×480/ 29.97PsF	720×480/ 29.97PsF	Composite 720×480/ 29.97PsF	DV (720×480/ 29.97PsF)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	480P	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	Muting	720×480/ 59.94P	Output disabled	
			Camera/ i.LINK	Disable				

Video format	Input/Output settings				Output signal (i.LINK (HDV/DV) is I/O signal)			
	Output& i.LINK	**23.98P Output**	**Source Select**	**i.LINK I/O**	**HD/SD SDI OUT**	**HDMI**	**VIDEO OUT**	**i.LINK (HDV/DV)**
HQ 1920/ 23.98P& HQ 1440/ 23.98P	HD&HDV	PsF	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	1920×1080/ 23.98PsF	1920×1080/ 23.98PsF	1920×1080/ 23.98PsF Y signal	
			Camera/ i.LINK	Disable				
		Pull Down	i.LINK	Enable	Muting			
			Camera	Enable	1920×1080/ 59.94i 2:3 pull down	1920×1080/ 59.94i 2:3 pull down Y signal	1920×1080/ 59.94i 2:3 pull down	
			Camera/ i.LINK	Disable				
	SD&HDV	–	i.LINK	Enable	Muting			
			Camera	Enable	720×480/ 59.94i 2:3 pull down	720×480/ 59.94i 2:3 pull down	Composite 720×480/ 59.94i 2:3 pull down	
			Camera/ i.LINK	Disable				
	SD&DV	–	i.LINK	Enable	Muting			
			Camera	Enable	720×480/ 59.94i 2:3 pull down	720×480/ 59.94i 2:3 pull down	Composite 720×480/ 59.94i 2:3 pull down	
			Camera/ i.LINK	Disable				
	480P	–	i.LINK	Enable	Muting			
			Camera	Enable	Muting	720×480/ 59.94P	Output disabled	
			Camera/ i.LINK	Disable				

Video format	Input/Output settings				Output signal (i.LINK (HDV/DV) is I/O signal)			
	Output& i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
SP 1440/ 23.98P	HD&HDV	PsF cannot be selected						
		Pull Down	i.LINK	Enable	1920×1080/ 59.94i 2:3 pull down	1920×1080/ 59.94i 2:3 pull down	1920×1080/ 59.94i 2:3 pull down Y signal	HDV (1920×1080/ 59.94i 2:3 pull down)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	SD&HDV	–	i.LINK	Enable	720×480/ 59.94i 2:3 pull down	720×480/ 59.94i 2:3 pull down	Composite 720×480/ 59.94i 2:3 pull down	HDV (1920×1080/ 59.94i 2:3 pull down)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	SD&DV	–	i.LINK	Enable	720×480/ 59.94i 2:3 pull down	720×480/ 59.94i 2:3 pull down	Composite 720×480/ 59.94i 2:3 pull down	DV (720×480/ 59.94i 2:3 pull down)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	480P	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	Muting	720×480/ 59.94P	Output disabled	
			Camera/ i.LINK	Disable				
HQ 1280/ 59.94P	HD&HDV	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	720×480/ 59.94P	720×480/ 59.94P	720×480/ 59.94P Y signal	
			Camera/ i.LINK	Disable				
	SD&HDV	–	i.LINK	Enable	Muting			
			Camera	Enable	720×480/ 59.94i P→i conversion	720×480/ 59.94i P→i conversion	Composite 720×480/ 59.94i P→i conversion	
			Camera/ i.LINK	Disable				
	SD&DV	–	i.LINK	Enable	720×480/ 59.94i P→i conversion	720×480/ 59.94i P→i conversion	Composite 720×480/ 59.94i P→i conversion	DV (720×480/ 59.94i P→i conversion)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	480P	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	Muting	720×480/ 59.94P	Output disabled	
			Camera/ i.LINK	Disable				

Video format	Input/Output settings				Output signal (i.LINK (HDV/DV) is I/O signal)			
	Output& i.LINK	**23.98P Output**	**Source Select**	**i.LINK I/O**	**HD/SD SDI OUT**	**HDMI**	**VIDEO OUT**	**i.LINK (HDV/DV)**
HQ 1280/ 29.97P	HD&HDV	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	720×480/ 59.94P	720×480/ 59.94P	720×480/ 59.94P Y signal	
			Camera/ i.LINK	Disable				
	SD&HDV	–	i.LINK	Enable	Muting			
			Camera	Enable	720×480/ 29.97PsF	720×480/ 29.97PsF	Composite 720×480/ 29.97PsF	
			Camera/ i.LINK	Disable				
	SD&DV	–	i.LINK	Enable	720×480/ 29.97PsF	720×480/ 29.97PsF	Composite 720×480/ 29.97PsF	DV (720×480/ 29.97PsF)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	480P	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	Muting	720×480/ 59.94P	Output disabled	
			Camera/ i.LINK	Disable				
HQ 1280/ 23.98P	HD&HDV	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	720×480/ 59.94P 2:3 pull down	720×480/ 59.94P 2:3 pull down	720×480/ 59.94P 2:3 pull down Y signal	
			Camera/ i.LINK	Disable				
	SD&HDV	–	i.LINK	Enable	Muting			
			Camera	Enable	720×480/ 59.94i 2:3 pull down	720×480/ 59.94i 2:3 pull down	Composite 720×480/ 59.94i 2:3 pull down	
			Camera/ i.LINK	Disable				
	SD&DV	–	i.LINK	Enable	Muting			
			Camera	Enable	720×480/ 59.94i 2:3 pull down	720×480/ 59.94i 2:3 pull down	Composite 720×480/ 59.94i 2:3 pull down	
			Camera/ i.LINK	Disable				
	480P	–	i.LINK	Enable	Muting			
			Camera	Enable	Muting	720×480/ 59.94P	Output disabled	
			Camera/ i.LINK	Disable				
DVCAM/ 59.94i	HD&HDV and SD&HDV cannot be selected							
	SD&DV	–	i.LINK	Enable	720×480/ 59.94i	720×480/ 59.94i	Composite 720×480/ 59.94i	DV (720×480/ 59.94i)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	480P cannot be selected							

Video format	Input/Output settings				Output signal (i.LINK (HDV/DV) is I/O signal)			
	Output& i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI OUT	VIDEO OUT	i.LINK (HDV/DV)
DVCAM/ 29.97P	HD&HDV and SD&HDV cannot be selected							
	SD&DV	–	i.LINK	Enable	720×480/ 29.97PsF	720×480/ 29.97PsF	Composite 720×480/ 29.97PsF	DV (720×480/ 29.97PsF)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	480P cannot be selected							

Video formats and output signals, as specified by Input/Output settings (when OPERATION >Format >Country is set to PAL)

Video format	Input/Output settings				Output signal (i.LINK (HDV/DV) is I/O signal)			
	Output& i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI OUT	VIDEO OUT	i.LINK (HDV/DV)
HQ 1920/ 50i&HQ 1440/50i	HD&HDV	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	1920×1080/ 50i	1920×1080/ 50i	1920×1080/ 50i Y signal	
			Camera/ i.LINK	Disable				
	SD&HDV	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	720×576/50i	720×576/ 50i	Composite 720×576/50i	
			Camera/ i.LINK	Disable				
	SD&DV	–	i.LINK	Enable	720×576/50i	720×576/ 50i	Composite 720×576/50i	DV (720×576/ 50i)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	576P	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	Muting	720×576/ 50P	Muting	
			Camera/ i.LINK	Disable				

Video format	Input/Output settings				Output signal (i.LINK (HDV/DV) is I/O signal)			
	Output& i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
SP 1440/ 50i	HD&HDV	–	i.LINK	Enable	1920×1080/ 50i	1920×1080/ 50i	1920×1080/ 50i Y signal	HDV (1920×1080/ 50i)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	SD&HDV	–	i.LINK	Enable	720×576/50i	720×576/ 50i	Composite 720×576/50i	HDV (1920×1080/ 50i)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	SD&DV	–	i.LINK	Enable	720×576/50i	720×576/ 50i	Composite 720×576/50i	DV (720×576/ 50i)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	576P	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	Muting	720×576/ 50P	Output disabled	
			Camera/ i.LINK	Disable				
HQ 1920/ 25P& HQ 1440/ 25P	HD&HDV	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	1920×1080/ 25PsF	1920×1080/ 25PsF	1920×1080/ 25PsF Y signal	
			Camera/ i.LINK	Disable				
	SD&HDV	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	720×576/ 25PsF	720×576/ 25PsF	Composite 720×576/ 25PsF	
			Camera/ i.LINK	Disable				
	SD&DV	–	i.LINK	Enable	720×576/ 25PsF	720×576/ 25PsF	Composite 720×576/ 25PsF	DV (720×576/ 25PsF)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	576P	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	Muting	720×576/ 50P	Output disabled	
			Camera/ i.LINK	Disable				

Video format	Input/Output settings				Output signal (i.LINK (HDV/DV) is I/O signal)			
	Output& i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
HQ 1280/ 50P	HD&HDV	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	720×576/50P	720×576/ 50P	720×576/ 50P Y signal	
			Camera/ i.LINK	Disable				
	SD&HDV	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	720×576/50i P→i conversion	720×576/ 50i P→i conversion	Composite 720×576/50i P→i conversion	
			Camera/ i.LINK	Disable				
	SD&DV	–	i.LINK	Enable	720×576/50i P→i conversion	720×576/ 50i P→i conversion	Composite 720×576/50i P→i conversion	DV (720×576/ 50i P→i conversion)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	576P	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	Muting	720×576/ 50P	Output disabled	
			Camera/ i.LINK	Disable				
HQ 1280/ 25P	HD&HDV	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	720×576/50P	720×576/ 50P	720×576/ 50P Y signal	
			Camera/ i.LINK	Disable				
	SD&HDV	–	i.LINK	Enable	Muting			
			Camera	Enable	720×576/ 25PsF	720×576/ 25PsF	Composite 720×576/ 25PsF	
			Camera/ i.LINK	Disable				
	SD&DV	–	i.LINK	Enable	720×576/ 25PsF	720×576/ 25PsF	Composite 720×576/ 25PsF	DV (720×576/ 25PsF)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	576P	–	i.LINK	Enable	Muting			Input/Output disabled
			Camera	Enable	Muting	720×576/ 50P	Output disabled	
			Camera/ i.LINK	Disable				
DVCAM/ 50i	HD&HDV and SD&HDV cannot be selected							
	SD	–	i.LINK	Enable	720×576/50i	720×576/ 50i	Composite 720×576/50i	DV (720×576/ 50i)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	576P cannot be selected							

Video format	Input/Output settings				Output signal (i.LINK (HDV/DV) is I/O signal)			
	Output& i.LINK	**23.98P Output**	**Source Select**	**i.LINK I/O**	**HD/SD SDI OUT**	**HDMI**	**VIDEO OUT**	**i.LINK (HDV/DV)**
DVCAM/ 25P	HD&HDV and SD&HDV cannot be selected							
	SD	–	i.LINK	Enable	720×576/ 25PsF	720×576/ 25PsF	Composite 720×576/ 25PsF	DV (720×576/ 50i)
			Camera	Enable				
			Camera/ i.LINK	Disable				Input/Output disabled
	576P cannot be selected							